

Amendment

A. In the Claims. Please cancel originally filed claims 1-11 and add new claims 12-30.

1-11. (canceled)

12. (new) A method of modulating antigen-specific T cells, comprising:

a) contacting a population of T cells with artificial antigen presenting cells that comprise:

- i. a liposome comprising a lipid bilayer comprised of neutral phospholipids and cholesterol;
- ii. at least one GM-1 ganglioside molecule disposed in the lipid bilayer;
- iii. a cholera toxin β subunit bound to a GM-1 ganglioside molecule;
- iv. an MHC component loaded with an antigen of interest, wherein the antigen-loaded MHC component is bound to the cholera toxin β subunit;
- v. an accessory molecule that can stabilize an interaction between a T cell receptor and the antigen-loaded MHC component; and
- vi. an immunomodulatory molecule; and

b) incubating said T cells with said artificial antigen presenting cells so as modulate an activity of T cells specific for the antigen of interest.

13. (new) A method according to claim 12 wherein the population of antigen-specific T cells are enriched for reactivity with the antigen-of interest.

14. (new) A method according to claim 13 wherein the enrichment occurs by isolating T cells specific for the antigen of interest from a biological sample containing T cells.

15. (new) A method according to claim 13 wherein the biological sample is selected from the group consisting of whole blood, blood cells, blood plasma, and tissue.

16. (new) A method according to claim 14 wherein the isolation of T cells specific for the antigen of interest comprises:
- a) contacting a biological sample containing T cells suspected of being specific for the antigen of interest with an artificial antigen presenting cell that presents the antigen of interest so as to form complexes comprised of T cells specific for the antigen of interest and artificial antigen presenting cells that present the antigen of interest, wherein the artificial antigen presenting cells comprise:
 - i. a liposome comprising a lipid bilayer, wherein the lipid bilayer is comprised of neutral phospholipids and cholesterol;
 - ii. at least one GM-1 ganglioside molecule disposed in the lipid bilayer;
 - iii. a cholera toxin β subunit bound to a GM-1 ganglioside molecule;
 - iv. an MHC component loaded with the antigen of interest, wherein the antigen-loaded MHC component is bound to the cholera toxin β subunit; and
 - v. an accessory molecule that can stabilize an interaction between a T cell receptor and the antigen-loaded MHC component; and
 - b) isolating T cells specific for the antigen of interest from the complexes, if any.
17. (new) A method according to claim 12 wherein the T cells are CD4 T cells.
18. (new) A method according to claim 12 wherein the CD4 T cells are selected from the group consisting of Th0 cells, Th1 cells, Th2 cells, and Th3 cells.
19. (new) A method according to claim 18 wherein the modulation comprises shifting the relative populations of CD4 T cells such that a greater percentage of the CD4 T cells are Th0 cells after modulation than before modulation.

20. (new) A method according to claim 18 wherein the modulation comprises shifting the relative populations of CD4 T cells such that a greater percentage of the CD4 T cells are Th1 cells after modulation than before modulation.
21. (new) A method according to claim 17 wherein the modulation comprises shifting the relative populations of CD4 T cells such that a greater percentage of the CD4 T cells are Th2 cells after modulation than before modulation.
22. (new) A method according to claim 17 wherein the modulation comprises shifting the relative populations of CD4 T cells such that a greater percentage of the CD4 T cells are Th3 cells after modulation than before modulation.
23. (new) A method according to claim 12 wherein the modulation results in altering the phenotype of the antigen-specific T cells.
24. (new) A method according to claim 12 wherein the modulation results in inducing apoptosis of the antigen-specific T cells.
25. (new) A method according to claim 12 wherein the modulation results in inducing anergy in the antigen-specific T cells.
26. (new) A method according to claim 12 wherein the modulation results in proliferation of the antigen-specific T cells.
27. (new) A method according to claim 12 wherein the immunomodulatory molecule is selected from the group consisting of a cytokine, a cytokine receptor, a chemokine, and a chemokine receptor.

28. (new) A method according to claim 12 wherein the immunomodulatory molecule is selected from the group consisting of a B7-1 molecule, a B7-2 molecule, and an OX40 molecule.
29. (new) A method according to claim 12 wherein the modulated antigen-specific T cells are useful for treating a T cell-mediated disease.
30. (new) A method according to claim 30 wherein the T cell-mediated disease is selected from the group consisting of graft versus host disease, an autoimmune disease, an allergy, a cancer, and viral infection.